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GUARDRAIL FOR ATHLETIC FIELDS

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Fig. 1.

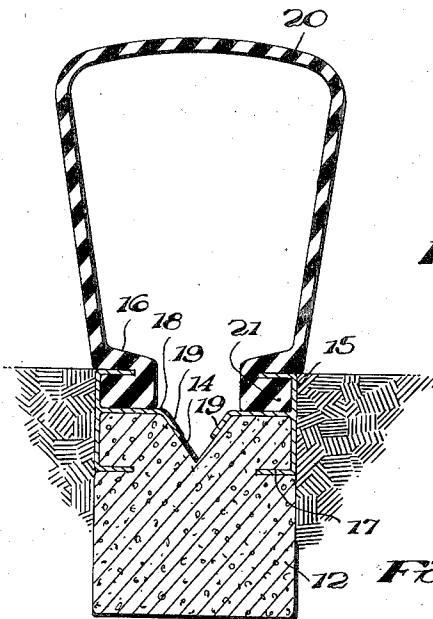
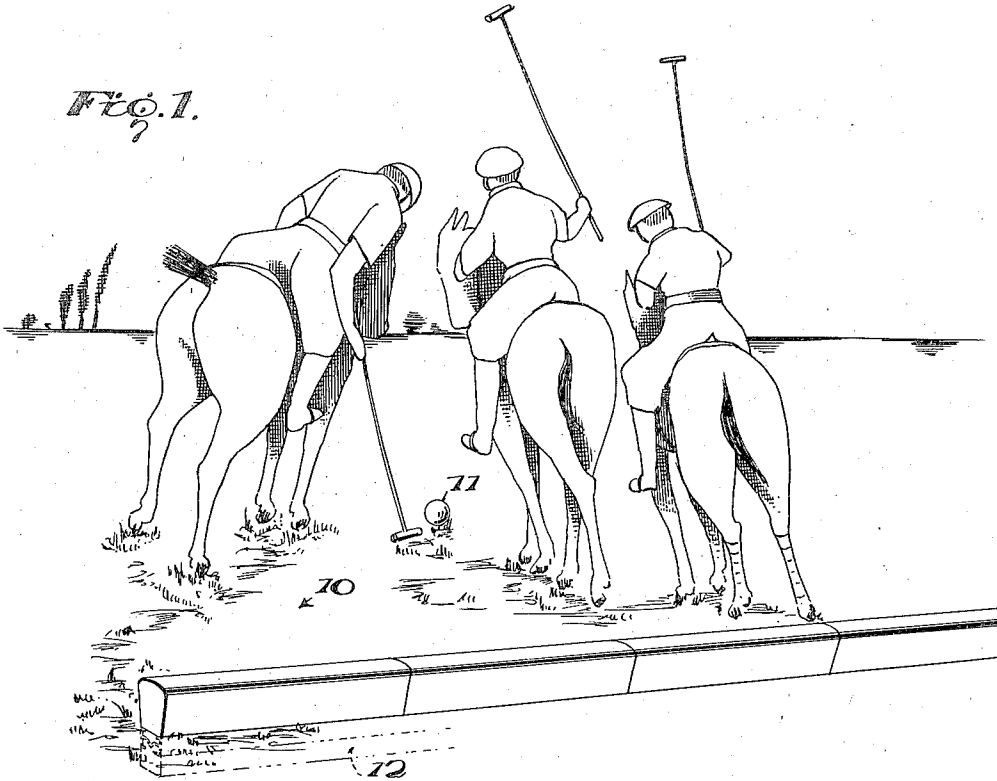
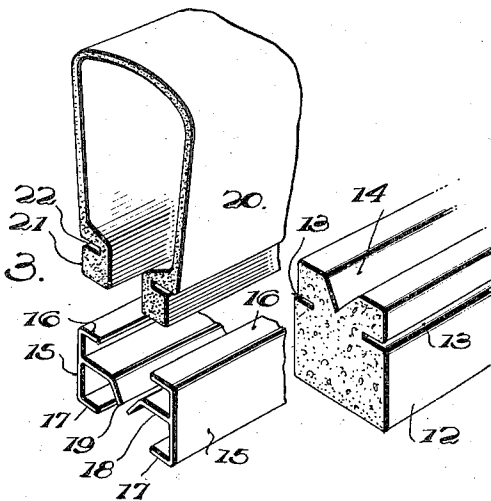


Fig. 3.



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GUARDRAIL FOR ATHLETIC FIELDS

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16 Claims. (Cl. 273-1)

My invention relates to improvements in guard rails or the like and more particularly to side or guard rails for athletic fields such as polo fields, although not necessarily restricted to this use.

5 In games such as polo the sides of the playing field are provided with rails or side-boards which stop the ball or other playing object from leaving the playing field. On the usual polo field these rails consist of large wooden planks arranged on edge and secured to stakes driven into the ground. While these boards or planks serve the purpose of keeping the ball in play on the field, they are a source of great danger to the players and their mounts. The ponies often stumble over the planks injuring themselves and sometimes throw their riders on or against the planks, often resulting in serious injuries to the players.

10 An important object of the present invention is the provision of a side rail for polo fields or the like which will effectively keep the ball in play on the field and which will not injure the players or ponies.

15 Another object of my invention is to provide a rail of this character the rigid portions of which are arranged beneath the surface of the ground, and covered by the resilient portion of the rail.

20 A further object of this invention is the provision of a device of this character which may be made in sections of any desirable length, and which may be removed from the field or replaced with ease.

25 Still another object of this invention is to provide a device of this character which is of simple construction, inexpensive to manufacture, durable and efficient in service.

30 Other objects and advantages of this invention will be apparent during the course of the following description.

35 In the accompanying drawing which forms a part of this specification and wherein like characters of reference denote like parts throughout,

40 Figure 1 is a view of a portion of a polo field having my improved side rail applied thereto,

45 Figure 2 is a vertical sectional view of my device in place in the ground, and,

Figure 3 is a detail sectional view of the various parts of my device in disassembled position.

50 In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of my invention, the numeral 10 designates a polo field or the like on which the ball or other object of play 11 is adapted to be played. In place of the usual side board and stake construction I employ a base runner or elongated block 12 which 55 may be of concrete or other suitable material and

substantially square or rectangular in cross section. The base block 12 is embedded in the ground and is spaced below the surface of the ground as indicated in Figure 2. Each side of the block is provided with a horizontal relatively deep groove 13 spaced from the top of the block and arranged in the same horizontal plane. The sides of the block above the grooves 13 are preferably relieved and the upper surface of the block is preferably provided with a longitudinally extending centrally arranged groove 14 which may be V-shape in cross-section, as seen in Figure 2. The groove 14 extends the entire length of the block 12.

15 A pair of flanged metal angle irons or beams 15 are substantially E-shape in cross-section and each are provided with upper horizontal flanges 16 and lower horizontal flanges 17. The lower flanges 17 are adapted to extend into the grooves 13 in the block 12 while the upper flanges 16 are spaced a substantial distance above the top of the block. The vertical sides of beams 15 rest against the side walls of the block 12 and due to the relieved portions of the walls of the block, the beams 15 form continuations of the block walls, as seen in Figure 2.

20 Central flanges 18 are arranged intermediate the flanges 16 and 17 in parallel relation thereto and are adapted to rest upon the top of block 12. Flanges 18 are longer than flanges 16 and 17 and have their ends turned down at 19 to engage the walls of groove 14 in the block 12.

25 In use the block 12 and beams 15 form an integral unit which is embedded in the ground and which may be divided into sections of suitable length, if desired. The beams may be molded on the block 12 or the block may be made separately and the beams slid into place from the end of the block. The block with the beams in place at the top thereof is then embedded in the ground with the top of upper flange 16 arranged flush with the surface of the ground, or spaced below the surface of the ground, as desired.

30 The guard rail member comprises a rubber casing 20 which is of inverted substantially U-shape in cross-section and which is provided with thickened portions or beads 21 at its lower ends. Each of the beads 21 is provided with horizontal grooves 22 adapted to receive the flanges 16 of beams 15 and the thickness of the portion of beads 21 below grooves 22 corresponds to the space between the flanges 16 and 18 of the beams.

35 There is normally an opening of substantial width between the adjacent edges of beads 21, and casing 20 is preferably wider at its top than 55

at its lower end. To assemble the casing on the beams, the beads 21 are pressed together against the tension of the side walls of the casing and inserted between the beam flanges 16. They are then permitted to expand with the grooves 22 receiving the flanges 16 and the portion of the beads below grooves 22 take up the space between the beam flanges 16 and 18. The normal spring of the rubber casing walls is sufficient to maintain the beads 21 in position in the beams 15, and the casing may be removed by collapsing the casing after the fashion of the well known clincher automobile tire and rim.

In the assembled position shown in Figure 2 the sides of casing 20 extend laterally beyond the sides of beams 15 and completely overlie and cover the tops of the beams. The side walls of the casing are outwardly inclined to prevent a polo ball or other object of play from bouncing over the rail. If a pony stumbles or falls upon the resilient rail casing he will not be injured thereby nor will the players be injured by falling on or against the rail. All of the rigid or non-resilient parts are arranged below the level of the ground and covered by the resilient rail casing.

The rail casing may be made in convenient lengths or sections, and may be removed and stored away after the game, or after the playing season. The block 12 and beams 15 remain embedded in the ground to again receive the casing when play is to be resumed. The beams 15 may be made in sections of suitable length if desired, and may also be combined in a single integral structure connected by the flanges 18, depending upon convenience in manufacture.

While the guard rail of this invention is particularly well adapted for polo fields, it may obviously be used wherever a guard rail or similar structure is desired. The ends of the casing sections may be left open as in Figure 3 or they may be closed by a thin wall integral with the casing sections or independent thereof. The casing can be made white by the oxide process or by painting, and as it is not subjected to any great wear or strain in use it can be made from inexpensive rubber or reclaimed rubber, and will have a long life.

It will be seen that I have provided a guard rail for polo fields or for other uses which is inexpensive, efficient in use and completely safe when used in games such as polo where injuries to players and their valuable ponies are frequent with the use of the usual guard rails.

While I have shown and described the preferred embodiment of my invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, what I claim and desire to protect by Letters Patent is:

1. A guard rail for polo fields comprising a base runner arranged below the level of the ground, and a resilient rail section secured to said base runner and extending above the surface of the ground.

2. A guard rail for polo fields comprising a base runner arranged below the level of the ground, and a resilient rail section secured to said base runner and extending above the surface of the ground, said resilient rail completely covering the base runner.

3. A guard rail for polo fields comprising a base runner arranged below the level of the

ground, and a resilient rail section removably secured to said base runner and extending above the surface of the ground.

4. A guard rail for polo fields comprising a base runner arranged below the level of the ground, and a resilient rail section removably secured to said base runner and extending above the surface of the ground, said base runner being completely covered by said resilient rail.

5. In a device of the character described, a base block embedded in the ground, a resilient rail member arranged above the ground, and interlocking means removably securing the rail member to the base block.

6. In a device of the character described, a base block embedded in the ground, said base block having a flange spaced above its upper end, and a resilient rail member arranged above the ground and having a portion adapted to be engaged by the flange to secure the rail member to the base block.

7. In a device of the character described, a base member adapted to be embedded in the ground and consisting of a block and an angle beam carried by the block, and a resilient rail member secured to the block by the angle beam.

8. In a device of the character described, a base member adapted to be embedded in the ground and consisting of a block and an angle beam carried by the block, and a resilient rail member secured to the block by the angle beam, said resilient rail member having a substantially inverted U-shaped cross section.

9. In a device of the character described, a base member embedded in the ground and having flanges at its upper end, and a resilient rail member of substantially inverted U-shaped cross section adapted to be engaged by said flanges to secure the rail member to the base member, said rail being arranged above the ground.

10. In a device of the character described, a base member having flanges at its upper end, and a resilient rail member having grooves adapted to receive said flanges to secure the rail member to the base member.

11. In a device of the character described, a base member having flanges at its upper end, and a resilient rail member having grooves adapted to removably receive said flanges to secure the rail member to the base member, said rail member having a substantially inverted U-shaped cross section.

12. In a device of the character described, a base member embedded in the ground and having metallic inwardly extending flanges spaced above its upper end, and a resilient rail member arranged above the ground and having spaced lower ends provided with beaded portions adapted to extend beneath the flanges on the base member to removably secure the resilient rail member to the base member.

13. In a device of the character described, a base member having metallic inwardly extending flanges spaced above its upper end, and a resilient rail member having spaced lower ends provided with beaded portions adapted to extend beneath the flanges on the base member to removably secure the resilient rail member to the base member, said rail member having portions overlying the upper sides of the flanges.

14. In a device of the character described, a base member adapted to be embedded below the level of the ground and comprising a block formed of plastic material having metallic angle beams secured to the upper portion thereof, said angle beams being provided with spaced oppositely dis-

posed flanges spaced above the block, and a resilient rail member adapted to extend above the ground level and having spaced lower ends provided with lateral extensions adapted to be removably received below the flanges on the angle beams.

15. In a device of the character described, a base member adapted to be embedded below the level of the ground and comprising a block formed of plastic material having metallic angle beams secured to the upper portion thereof, said angle beams being provided with spaced oppositely disposed flanges spaced above the block, and a resilient rail member adapted to extend above the

ground level and having spaced lower ends provided with lateral extensions adapted to be removably received below the flanges on the angle beams, said rail member having portions overlying the upper portions of the angle beam flanges.

16. In a device of the character described, a base member having longitudinally extending oppositely disposed flanges at its upper end, and a resilient rail member having beaded portions adjacent its lower end adapted to engage the lower sides of said flanges, said resilient rail member having portions overlying the flanges on the base member.

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